Release notes for ENDF/B Development e-077_Ir_000 evaluation

October 13, 2016

- `fudge-4.0` Warnings:

  1. Mislabled emitted particle
     Reading ENDF file: ../e-077_Ir_000.endf (Error # 0): ZAP messed up

     `WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0`

  2. FIXME: Generic fudge unimplemented message
     reaction label 1: e- + Ir + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

     `WARNING: Checking not yet implemented for energyLoss type data`

  3. FIXME: Generic fudge unimplemented message
     reaction label 2: e- + Ir [excitation] / Product: e- (Error # 0): Generic unimp (c)

     `WARNING: Checking not yet implemented for energyLoss type data`

- `fudge-4.0` Errors:

  1. Calculated and tabulated thresholds don't agree
     reaction label 0: e- + Ir [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  2. Calculated and tabulated thresholds don't agree
     reaction label 1: e- + Ir + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  3. Calculated and tabulated thresholds don't agree
     reaction label 2: e- + Ir [excitation] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  4. Calculated and tabulated thresholds don't agree
     reaction label 3: e- + e- + Ir1s1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 76314. eV!`

  5. Calculated and tabulated thresholds don't agree
     reaction label 4: e- + e- + Ir2s1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 13396. eV!`

  6. Calculated and tabulated thresholds don't agree
     reaction label 5: e- + e- + Ir2p1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 12859. eV!`

  7. Calculated and tabulated thresholds don't agree
     reaction label 6: e- + e- + Ir2p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 11214. eV!
```

8. Calculated and tabulated thresholds don't agree
   reaction label 7: e- + e- + Ir3s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3145.7 eV!
```

9. Calculated and tabulated thresholds don't agree
   reaction label 8: e- + e- + Ir3p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2900.2 eV!
```

10. Calculated and tabulated thresholds don't agree
    reaction label 9: e- + e- + Ir3p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2539. eV!
```

11. Calculated and tabulated thresholds don't agree
    reaction label 10: e- + e- + Ir3d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2123.2 eV!
```

12. Calculated and tabulated thresholds don't agree
    reaction label 11: e- + e- + Ir3d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2044.8 eV!
```

13. Calculated and tabulated thresholds don't agree
    reaction label 12: e- + e- + Ir4s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 675.3200000000001 eV!
```

14. Calculated and tabulated thresholds don't agree
    reaction label 13: e- + e- + Ir4p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 570.35 eV!
```

15. Calculated and tabulated thresholds don't agree
    reaction label 14: e- + e- + Ir4p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 484.55 eV!
```

16. Calculated and tabulated thresholds don't agree
    reaction label 15: e- + e- + Ir4d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 310.52 eV!
```

17. Calculated and tabulated thresholds don't agree
    reaction label 16: e- + e- + Ir4d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 294.58 eV!
```

18. Calculated and tabulated thresholds don't agree
    reaction label 17: e- + e- + Ir4f5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 71.33 eV!
```

19. Calculated and tabulated thresholds don't agree
reaction label 18: e- + e- + Ir4f7/2 / Cross section: (Error # 0): Threshold mismatch

    ```
    WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 68.06 eV!
    ```

20. Calculated and tabulated thresholds don't agree
reaction label 19: e- + e- + Ir5s1/2 / Cross section: (Error # 0): Threshold mismatch

    ```
    WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 99.14 eV!
    ```

21. Calculated and tabulated thresholds don't agree
reaction label 20: e- + e- + Ir5p1/2 / Cross section: (Error # 0): Threshold mismatch

    ```
    WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 65.68000000000001 eV!
    ```

22. Calculated and tabulated thresholds don't agree
reaction label 21: e- + e- + Ir5p3/2 / Cross section: (Error # 0): Threshold mismatch

    ```
    WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 51.66 eV!
    ```

23. Calculated and tabulated thresholds don't agree
reaction label 22: e- + e- + Ir5d3/2 / Cross section: (Error # 0): Threshold mismatch

    ```
    WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7.99 eV!
    ```

24. Calculated and tabulated thresholds don't agree
reaction label 23: e- + e- + Ir5d5/2 / Cross section: (Error # 0): Threshold mismatch

    ```
    WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 6.79 eV!
    ```

- `xsectplotter` Warnings:

  1. Mislabled emitted particle
  Error: ZAP messed up

     ```
     stderr while processing crossSection

         WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
     ... [4 more lines]
     ```